CITY OF HARRISBURG BUREAU OF WATER

200 Consumer Confidence Report



Office of the Mayor The City of Harrisburg

M.L.K. City Government Center 10 North Second Street Harrisburg, PA 17101-1678

Stephen R. Reed Mayor (717) 255-3040

Dear Harrisburg Water Customer,

This annual Consumer Confidence Report provides you with important information about our drinking water, its sources and our efforts to protect the water supply and its quality.

We are proud of the drinking water provided to you and the dependable conveyance system that delivers it to your homes and businesses. The City of Harrisburg and The Harrisburg Authority are dedicated to our primary objective of providing you with the highest quality water at a reasonable cost.

The Harrisburg Water System reflects a committed team approach to ensuring the highest standards of water quality and supply to fill our region's growing potable water needs. Employees from the Harrisburg Bureau of Water are key to this effort and each willingly accepts the responsibilities and challenges of maintaining these standards. While drought conditions are fortunately not in our foreseeable future, we remain committed to our water conservation efforts and are pleased to report that your Harrisburg Water System is one of the few that has a redundant back-up supply system as a result of major water system upgrades undertaken during the early 1990's.

The City of Harrisburg and The Harrisburg Authority work closely with the PA Dept. of Environmental Protection and the American Water Works Association in the Partnership for Safe Drinking Water, which strives to bring the best available technologies and practices for both quality and customer service. To this end, we are pleased to report that the Partnership has, for the sixth consecutive year, again bestowed the prestigious Director's Award on your Harrisburg Water System, a distinction given to only a few water systems in our nation, which shows a continuing commitment to the highest standards of quality and service.

Know that you have our gratitude for your patronage and support over this past year. We look forward to continuing to provide this most precious resource to you in the future.

Stephen R. Reed, Mayor

Source Water



The William T. DeHart Dam and Reservoir is the Harrisburg Water System's primary surface water source; the Susquehanna River is our secondary surface water source, which is utilized in case of severe drought or emergency.

The DeHart Reservoir impounds water flowing from Clark Creek and twenty-three (23) smaller tributaries, collects water from a 21.62 square mile watershed and has a six (6) billion gallon storage capacity when it is completely full. The Susquehanna River Intake and Pump Station utilizes three (3)

vertical turbine pumps to transfer up to twenty (20) million gallons per day of raw water from the river intake to the water treatment facility, when required.

As water travels over the surface of the land and through the ground it dissolves naturally occurring minerals and may collect radioactive materials and contaminants from animal and human activity. Consequently, we monitor the streams that feed the water sources for contaminants and other parameters as mandated by the EPA Safe Drinking Water Act. Contaminants that may be present in the source waters include bacteria, salts, metals, pesticides, herbicides, radioactive materials, inorganic and organic compounds from petroleum, agricultural or industrial use. Harrisburg's water filtration and treatment plant is designed and operated to remove these contaminants and provide you with finished water that meets or exceeds all of the Federal and State Drinking Water Regulations.

The Treatment Process:

As raw water enters the treatment facility, lime and alum are added, which acts as a coagulant and enables minute particles to adhere together. This process promotes the formation of suspended and colloidal particles that will increase to a sufficient size and density to settle in the sedimentation basins. After sedimentation, the water is filtered to remove any remaining particulate matter. Chlorine is



added for disinfection and removal of pathogenic (disease producing) organisms. Soda ash and caustic soda are added for pH and alkalinity control and zinc orthophosphate is added for corrosion control in the distribution system and has been successful in preventing the leaching of excessive metals from consumers' plumbing into their drinking water. The treated water is pumped to three finished water storage reservoirs from which the potable water is gravity fed to your homes and businesses.

Further, fluoride is added, as recommended by the American Dental Society, for the purpose of thwarting tooth decay. The yearly average concentration of fluoride was 0.91 mg/l, with the monthly maximum detected at 0.98 mg/l. The fluoride concentrations were well below the Maximum Contaminate Level (MCL) of 2.0 mg/l.

Water Quality Information

The U.S. Environmental Protection Agency (EPA) and the Pennsylvania Department of Environmental Protection (DEP) have promulgated regulations under the Safe Drinking Water Act that limit specific contaminants in water supplied by public water systems. Also, the Food and Drug Administration (FDA) Regulations establish limits for contaminant levels in bottled water and those facilities associated with the production or the modification of food, beverages or pharmaceuticals. The Bureau of Water takes the responsibility of meeting these maximum contaminant levels very



seriously. In years past we have successfully provided you with a high quality of potable water that was in compliance with all of the standards and contaminant levels established by the respective regulatory agencies.

The presence of contaminants, however, does not necessarily indicate that the affected water poses a health risk. More information regarding contaminants and potential health effects can be obtained by calling EPA's Safe Drinking Water Hotline at 800-426-4791 or visit the EPA website at www.epa.gov. or DEP at www.dep.state.us.

Microbiologial Sampling & Analysis

The Bureau's Water Quality Laboratory collects and analyzes over 80 drinking water samples each month from the distribution system to test for total coliform and E.coli bacteria, which are naturally present in the environment. Their presence is an indicator that other potentially harmful pathogens may be present. The maximum contaminant level for coliform bacteria is less than 5% positive samples; our maximum contaminate level goal is zero. We are pleased to report that all bacteriological samples collected and analyzed during 2007 and the six previous years demonstrated the absence of coliform bacteria contamination within our potable water distribution system.



Mission Statement

"The Bureau of Water is dedicated to the protection of the public health by providing a endeavor by promoting a team atmosphere with continuous improvement of our treat natural or man-made disaster, it is the endeavor of the Bureau to maintain an adequition system and to minimize/mitigate the effects of these disruptions."

Turbidity can negatively impact the aesthetics (clarity) and treatability of the wat

MCL	MCLG	YEARLY AVERAGE
Treatment Technique: 95% of all monthly samples must be less than or equal to 0.3 NTU	Less than 0.3 NTU	0.05 NTU
The individual filter effluent Turbidity greater than 1 (one) NTU	Less than 1.0 NTU	0.05 NTU

Suspended and colloidal matter such as clay, silt, finely divided organic and Inorganic matter,

Contaminants measured in water at the Customer's tap:

In the past we were involved with an extensive, mandatory, lead and copper sampling and analyses p 100% compliance with the EPA Action Levels. A Copper and Lead Survey analyses were completed well below the MCL of <0.015 mg/l for lead with all samples reported as none detected and <1.3 n of our Corrosion Control Program. As a result of this success we were again awarded a triennial samples.

Contaminants measured on water leaving the Treatment Plant			
Contaminant	MCL	MCLG	Yearly Average
Nitrate	10 MG/L	<1.0 MG.L	N/D
Fluoride	4.0 mg/L	4.0 mg/L	0.91
Iron	0.3 mg/L	None	0.05

Disinfection/Disinfection Byproduct Contaminants in the Distribution systematical design of the Distribution of the Distributi			
Contaminant	MCL		
Total Trihalomethanes	Average of the four Quarterly samples must be less than or equal to 80.0 PPB		
Haloacetic Acids (HAA5)	Average of four Quarterly samples must be less than 60.0 PPB		
	MRDL		
Chlorine residual	4.0		

reliable supply of high quality water. We strive to accomplish this ment processes, facilities, and services. In the event of either a late quantity, at an adequate pressure of potable water to the



er.

HIGHEST LEVEL	COMPLIANCE	SOURCE
1.18 NTU	YES	Soil Erosion And Degradation Of Organic matter
0.08 NTU	YES	Soil Erosion And Degradation Of Organic matter

and plankton and other microscopic organisms can cause turbidity in water.

rogram. This testing program was initiated in response to a regulatory requirement and demonstrated in 2007. The analyses revealed that the copper and lead concentrations at the residential taps were ng/l for copper, with the maximum concentration of 0.15 mg/l. This survey again verified the success ampling schedule, which will be conducted in 2010.

Maximum Detected	Compliance Source
None Detected	Run-off from fertilizer use, septic tanks, sewage, Erosion of natural deposits
0.98	Water additive which promotes strong teeth; soilerosion; discharge from fertilizer and aluminumfactories.
0.06	Corrosion of pipes and storage tanks; mine drainage; industrial discharge; soil erosion

m			
	MCLG	Annual Average	Compliance
	Zero PPB	30.0 PPB	Yes
	Zero PPB	40.0 PPB	Yes
	MRDLG		
	4.0	0.90 mg/L	Yes

Important Definitions

- **Action Level:** The concentration of a contaminant, which triggers a treatment, or other requirement, which a water system must follow.
- Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health.
- **Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water.
- Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water.
- Maximum Residual Disinfectant Level Goal (MRDLG): The level of a disinfectant in drinking water below which there is no known or expected risk to health.
- NTU: Nephelometric Turbidity Unit; a measure of particulate matter in the water.
- Parts per Billion (PPB) or Micrograms per liter: One part per billion corresponds to one penny in \$10,000,000 dollars.
- Parts per Million (PPM) or Milligrams per liter: One part per million corresponds to a one penny in \$10,000 dollars.
- **Picocurie per liter (pCi/L):** A curie is the amount of radioactivity in a gram of radium. A picocurie is one trillionth of a curie.
- **Treatment Technique (TT):** A required treatment process intended to reduce the level of a contaminant in drinking water.

Important Health Information



- Some people may be more vulnerable to contaminants in drinking water than the general population
- Immuno-compromised persons, such as persons with cancer, and those persons undergoing chemotherapy
- Persons who have undergone organ transplants
- People with HIV/AIDS or other immune system disorders
- Some elderly and infants can be particularly at risk from infections
- Such persons should seek advice about drinking water from their health care providers

About the Harrisburg Water System

- The William T. DeHart Dam was built to completion on July 1, 1940.
- Daily average of treated water produced for 2007 was 8.33 million gallons per day.
- Total water distributed in 2007 was 3.039 billion gallons.
- The distribution system is comprised of over 250 miles of pipe.
- There are three finished water storage reservoirs in Reservoir Park with a combined capacity of 40 million gallons.
- The average person uses 80-100 gallons of water per day.
- The average leaking faucet wastes approximately 15 gallons per day.
- The average leaking toilet wastes approximately 200 gallons per day.
- The Public Water Supply Identification Number is 7220049.

Customer Views are Welcome

If you are interested in learning more about the City of Harrisburg's Bureau of Water please call us at 238-8725. We encourage public interest and participation in our community's decisions affecting drinking water. Further, regular City Council meetings occur on the 2nd and 4th Tuesday of each month at 6:00 PM in the Martin Luther King, Jr. City Government Center. The public is always welcome. Every effort will be made to accommodate those customers and consumers who are not comfortable speaking English.

Este informe contiene informacio'n muy importante sobre su agua potable. Tradu'zcalo o' hable con alguien que lo entienda bien.

City of Harrisburg, Bureau of Water

Billing Information: 255-6514
24 Hour Water Emergencies: 255-3131
Meter Readings: 238-8566
Bureau of Water Office: 238-8725

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Important Information About Your Drinking Water.